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PSYCHOLOGICAL HEALTH PROGRAM
NATIONAL GUARD BUREAU

Traumatic Brain Injury

WVNG Coffey Break

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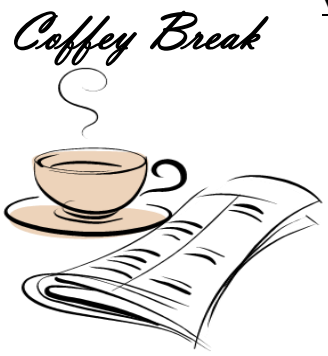
This month's topic is **Traumatic Brain Injury (TBI)**. March is Brain Injury Awareness Month. Working in the military environment, we often hear TBI mentioned in relation to injuries sustained in theater. When the phrase "brain injury" is used, we may assume the condition is severe and chronic. The focus of this newsletter is to provide a better understanding of what TBI is, causes of traumatic brain injury, symptoms, and of course, treatment. Regardless if you feel this topic does not pertain to your life situation, please take the time to become better educated on an issue that is impacting some of our military before hitting "Delete" on your computer.

"Pain of mind is worse than pain of body."
Latin Proverb

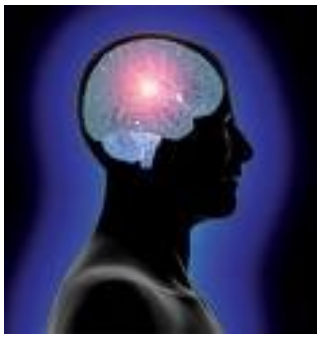
The mission of the National Guard Psychological Health Program is to advocate, promote and guide National Guard members and their families by supporting psychological fitness for operational readiness. For contact information regarding the Director of Psychological Health in your state or territory or other resources, go to: www.jointservicessupport.org/

Quick Facts

- Every American has a 1:300 chance of sustaining a traumatic brain injury each year
- Sports-related brain injuries are estimated as high as 3.8 million per year
- Using a seatbelt and wearing a helmet are the best ways to prevent a TBI.
- The areas most often injured are the frontal lobes that control thinking and emotional regulation.
- A blow to one part of the brain can cause damage throughout.
- 90% of TBIs are mild
- Most people do make a good recovery from TBI.



Break (brāk) definition *verb*: To interrupt or stop *break a habit*; *noun*: A respite or brief pause *taking a break*.



"Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity."

– World Health Organization, 1948

What is a Traumatic Brain Injury?

A traumatic brain injury (TBI) is a blow or jolt to the head or a penetrating head injury that disrupts the function of the brain. Not all blows or jolts to the head result in a TBI. The severity of such an injury may range from "mild"— a brief change in mental status or consciousness (as when a person suffers a concussion) —to "severe," an extended period of unconsciousness or amnesia after the injury. A TBI can result in short- or long-term problems with independent function.

For someone to be diagnosed with TBI, one of the following has occurred:

- There was a documented loss of consciousness. The length of time is not indicated. It can be very brief or it can be very long.
- The person has amnesia for the event. This means they cannot recall the actual traumatic event.
- A Glasgow Coma Scale (GCS) score of less than 15 was evident during the first 24 hours after the injury. This scale is used to assess the level of consciousness after a head injury.
- The presence of a skull fracture, post-traumatic seizure, or a CT scan or MRI (magnetic resonance imaging) scan abnormality associated with trauma.

Causes of TBI

In the military, the leading causes of TBI are:

- Falls (28%)
- Motor vehicle – traffic crashes (20%)
- Bullets, fragments, blasts (12%)
- Assaults (8%)

1. **Blasts** are the leading cause of TBI for active duty military personnel in war zones.
2. The two **age groups** at highest risk for TBI are 0-4 year olds and 15-19 year olds (civilian population).
3. Young men between the ages of **18 and 24** are at highest risk for TBI in the military population. Certain military duties (e.g., paratrooper) increase the risk of sustaining a TBI.

Although recent attention has been intensively focused on combat-related TBI, it should be noted that TBI is not uncommon even in garrison and occurs during unusual daily activities; service members enjoy exciting leisure activities; they ride motorcycles, climb mountains and parachute from planes for recreation. In addition, physical training is an integral part of the service members' life. These activities are expected for our service members and contribute to a positive quality of life, but these activities can also increase risk for TBI.

Symptoms of a Mild Traumatic Brain Injury/Concussion

- Headaches or neck pain that does not go away
- Dizziness
- Excessive fatigue (tiredness)
- Concentration problems
- Forgetting things (memory problems)
- Mood changes (feeling sad or angry for no reason)
- Sleep problems
- Balance problems, light-headedness
- Ringing in the ears
- Vision change, eyes that tire easily
- Slowness in thinking, speaking, acting, or reading
- Getting lost or easily confused
- Urge to vomit (nausea)
- Increased sensitivity to lights, sounds, or distractions

Symptoms of mild TBI or concussion often resolve within hours to days and and almost always improve over 1 – 3 months. However, if symptoms persist without improvement, medical treatment should be sought.

Concussion/Mild TBI Screening

Unlike a severe or even moderate traumatic brain injury (TBI), a concussion or mild traumatic brain injury (mTBI) may not be readily identified. Recognizing the importance of early detection, the Department of Defense (DoD) and Department of Veterans Affairs (VA) have established system-wide screening and assessment procedures to identify concussion/mTBI in service members and veterans at the soonest opportunity and through multiple points of care.

Screening for concussion/mTBI involves a quick evaluation of possible exposure to a traumatic event including injuries that may occur during deployment, leave, or even civilian life following active duty. Clinicians work to establish if there was an alteration of consciousness (AOC) associated with the injury or traumatic event, and if the event resulted in any neurological changes or symptoms.

Because concussion/mTBI is not always recognized in the combat setting, screening of active duty service members also occurs through post-deployment health assessments (PDHA). Four questions adapted from the ***Brief Traumatic Brain Injury Survey (BTBIS)*** appear on the PDHA. Positive responses on all four questions should prompt a clinician interview to more fully evaluate for concussion/mTBI.

It is important to realize that not all individuals whose screen is positive have a concussion/mTBI.

Treatment

Distinction must be made between those who experience relatively mild injuries, never being admitted to a hospital, and those with more serious injuries. In the case of mild TBI, optimal treatment requires follow-up at a medical treatment facility.

Follow-up is necessary for two reasons: to provide information about mild head injury and its possible consequences and to determine if further treatment is needed.

For those with moderate/severe TBI, two systems of care are needed: At the front end of care, components such as emergency medical services (which convey the injured person to a medical center), emergency room care, trauma care, and acute medical care are needed. At the back end of care, a variety of components are required to respond to the needs of individuals in coma (short-term and long-term) and those who emerge from coma (inpatient care and return to the community).

Every individual with TBI is different, and treatment varies greatly depending on severity. What is important to remember is that the treatment program

PSYCHOLOGICAL HEALTH PROGRAM
NATIONAL GUARD BUREAU

Next Month's Topic:

Sexual Assault

References

Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury

www.dcoe.health.mil

Defense and Veterans Brain Injury Center

www.dvbic.org

Resources

Brainline.org – for Family and Friends

Brain Injury Association of WV – www.biausa.org

(continued from page 3)

should be shaping its services to fit the individual needs and not vice versa — shaping the individual to fit the services it has to offer. Each program should be offering hope and support for the injured individual's maximizing his/her functioning.

What sort of return of function is likely? Again, this will vary with each individual and with the choice of services available to him/her. What is very clear, however, is that when an appropriate range of services has been used, a variety of compensatory strategies and environmental changes should result — to help the injured individual function as fully as possible.

- For maximal recovery, several factors are essential to the individual with TBI:
  - The person with TBI must have social supports
  - The individual with TBI must gain access to a service network that is able to address the person's individual needs and teach the skills needed to compensate for losses and to define and achieve his/her goals.
  - The person with TBI must have access to accurate information, responsive to needs that vary over time.
  - The person with TBI must be able to draw upon inner resources and values.

Feedback on this article is welcomed. As always, if you have a concern about yourself or a family member, feel free to contact me. Services are free and confidential. I look forward to hearing from you. So……Step back , take a Coffey Break, and Drink to Your Health!

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"Take care of your body. It's the only place you have to live."

-Jim Rohn